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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,602	02/18/2004	Souta Nemoto	501.39982CX1	1022
20457	7590	03/29/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			WILSON, SCOTT R	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/779,602

Applicant(s)

NEMOTO ET AL.

Examiner

Scott R. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/18/04, 4/2/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi, Figure 22 in view of Sekiguchi, Figure 7. As to claim 1, Sekiguchi, Figure 22, discloses a liquid crystal display device comprising: a first transparent substrate (1) having a plurality of electrodes (5)(col. 20, line 35), a second transparent substrate (6), a liquid crystal (16) interposed between the first transparent substrate and the second transparent substrate, an illumination light source (78)(col. 20, line 49) disposed on a back side of the first transparent substrate, pixel regions arranged in a matrix (Fig. 17), and a reflecting film (50)(col. 20, line 53) formed between the first transparent substrate and the electrodes, the reflecting film having at least one light transmission aperture (50a) in each pixel region and without slits at positions corresponding to gaps between adjacent ones of the pixel regions. Sekiguchi, Figure 22 does not disclose expressly color filter layers, which overlap each other at portions corresponding to gaps between the pixels. Sekiguchi, Figure 7 discloses the same configuration of first and second transparent substrates, where the second transparent substrate has color filter layers (11), (12) and (13), and wherein peripheral portions of adjacent ones of the color filter layers overlap with each other at positions corresponding to the gaps between adjacent ones of the pixel regions (col. 13, lines 49-53). At the time of invention, it would have been obvious to a person of ordinary skill in the art to form the color filter (11) of Figure 22 in the overlapping configuration of Figure 7. The motivation for doing so would have been to create a multi-color seven-segment display. Therefore, it would have been obvious to combine Sekiguchi, Figure 22 with Sekiguchi, Figure 7 to obtain the invention as specified in claim 1.

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As to claim 2, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is opaque.

As to claim 3, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is semi-transparent, i.e. it has a finite opacity within a range from completely opaque to transparent.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi in view of Sakaguchi. As to claim 5, Sekiguchi, Figure 22, discloses a liquid crystal display device comprising: a first transparent substrate (1) having a plurality of electrodes (5)(col. 20, line 35), a second transparent substrate (6), a liquid crystal (16) interposed between the first transparent substrate and the second transparent substrate, an illumination light source (78)(col. 20, line 49) disposed on a back side of the first transparent substrate, pixel regions arranged in a matrix (Fig. 17), and a reflecting film (50)(col. 20, line 53) formed between the first transparent substrate and the electrodes, the reflecting film having at least one light transmission aperture in each pixel region and slits at positions corresponding to gaps between adjacent ones of the pixel regions. Sekiguchi, Figure 22 does not disclose expressly a light absorption film formed between the first transparent substrate and the reflecting film at positions corresponding to the slits. Sakaguchi, Figure 4, discloses a light absorption film (3)(col. 7, lines 42-44) formed between a transparent substrate (2)(Abstract) and a reflecting film (4) in an organic electroluminescent panel. At the time of invention, it would have been obvious to a person of ordinary skill in the art to form the liquid crystal display device of Sekiguchi with the absorption film of Sakaguchi. The motivation for doing so would have been to manufacture a LCD display with a desired color (Sakaguchi, col. 2, lines 31-34). Therefore, it would have been obvious to combine Sekiguchi with Sakaguchi, Figure 7 to obtain the invention as specified in claim 5.

As to claim 6, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is opaque.

As to claim 7, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is semi-transparent, i.e. it has a finite opacity within a range from completely opaque to transparent.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi in view of Sakaguchi. As to claim 8, Sekiguchi, Figure 22, discloses a liquid crystal display device comprising: a first transparent substrate (1) having a plurality of electrodes (5)(col. 20, line 35), a second transparent substrate (6), a liquid crystal (16) interposed between the first transparent substrate and the second transparent substrate, an illumination light source (78)(col. 20, line 49) disposed on a back side of the first transparent substrate, pixel regions arranged in a matrix (Fig. 17), and a reflecting film (50)(col. 20, line 53) formed between the first transparent substrate and the electrodes, the reflecting film having at least one light transmission aperture in each pixel region and slits at positions corresponding to gaps between adjacent ones of the pixel regions. Sekiguchi, Figure 22 does not disclose expressly a light absorption film formed between the first transparent substrate and the reflecting film at positions corresponding to the slits. Sakaguchi, Figure 4, discloses a light absorption film which is charged (3)(col. 7, lines 42-44) formed between a transparent substrate (2)(Abstract) and a reflecting film (4) in an organic electroluminescent panel. At the time of invention, it would have been obvious to a person of ordinary skill in the art to form the liquid crystal display device of Sekiguchi with the absorption film of Sakaguchi. The motivation for doing so would have been to manufacture a LCD display with a desired color (Sakaguchi, col. 2, lines 31-34). Therefore, it would have been obvious to combine Sekiguchi with Sakaguchi, Figure 7 to obtain the invention as specified in claim 8.

As to claim 9, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is opaque.

As to claim 10, Sekiguchi discloses that the reflecting film (50) is formed from aluminum (col. 20, line 34), which is semi-transparent, i.e. it has a finite opacity within a range from completely opaque to transparent.

As to claim 11, Sakaguchi, Figure 4, discloses that the surface of the light absorption film (3) is disposed at a height which is substantially at a height of a surface of the reflecting film (4).

Double Patenting

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 5-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,697,137. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the obvious variation of forming first and second electrodes opposite each other, and would not be patentable were one citable as prior art against the other.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: both the instant application and the patent claim discloses a liquid crystal display device comprising: a first transparent substrate having a plurality of electrodes, a second transparent substrate, a liquid crystal interposed between the first transparent substrate and the second transparent substrate, an illumination light source disposed on a back side of the first transparent substrate, pixel regions arranged in a matrix, and a reflecting film formed between the first transparent substrate and the electrodes, the reflecting film having at least one light transmission aperture in each pixel region and without slits at positions corresponding to gaps between adjacent ones of the pixel regions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott R. Wilson whose telephone number is 571-272-1925. The examiner can normally be reached on M-F 8:30 - 4:30 Eastern.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

srw
March 21, 2005